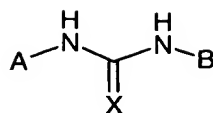


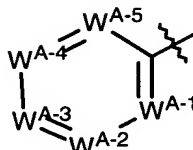
## Claims:

1. A compound of Formula I:



wherein X is O or S;

- 5 A is



wherein each  $W^{A-1}$ ,  $W^{A-2}$ ,  $W^{A-3}$ ,  $W^{A-4}$ , and  $W^{A-5}$  are independently N or  $CR_A$ , provided that no more than four of  $W^{A-1}$ ,  $W^{A-2}$ ,  $W^{A-3}$ ,  $W^{A-4}$ , or  $W^{A-5}$  are simultaneously N;

- 10 Each  $R_A$  is  $R_{A-1}$  or  $R_{A-2}$ , provided that one  $R_A$  is  $R_{A-2}$ ;

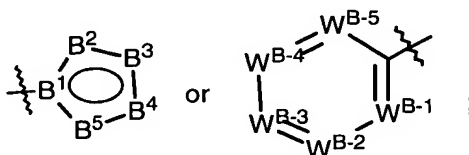
Each  $R_{A-1}$  is independently H, halogen, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, aryl,  $-N_3$ ,  $-SCN$ ,  $-CN$ ,  $-NO_2$ ,  $-OR_7$ ,  $-SR_8$ ,  
 15  $-S(O)R_8$ ,  $-S(O)_2R_8$ ,  $-N(R_9)_2$ ,  $-C(O)R_{10}$ ,  $-C(O)OR_7$ ,  $-C(O)N(R_9)_2$ ,  $-NR_9C(O)R_{10}$ ,  
 $-C(R_{10})=NOR_7$ ,  $-S(O)_2N(R_9)_2$ ,  $-NR_9S(O)_2R_8$ ,  $-N(R_9)C(O)N(R_9)_2$ ;

$R_{A-2}$  is  $R_1$ ,  $R_2$ ,  $OR_1$ ,  $OR_2$ ,  $N(R_{A-3})R_1$ ,  $N(R_{A-3})R_2$ ,  $SR_1$ , and  $SR_2$ ;

$R_{A-3}$  is H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl,  
 20 substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, or aryl;

B is a five or six-membered aromatic ring having up to 4 heteroatoms selected from  $-O-$ ,  $-N(R_{B-3})-$ ,  $=N-$ , or  $-S-$ ;

wherein B is



- 25

$B^1$  is N, or C;

$B^2$ ,  $B^3$ ,  $B^4$ , and  $B^5$  are independently N, O, S, C, provided that when valency allows, the N can have a third bond to  $R_{B-3}$ , and further provided that when valency allows, the C can have a fourth bond to  $R_{B-1}$ ;

Each  $R_{B-1}$  is independently H, halogen, alkyl, haloalkyl, substituted alkyl,  
 5 cycloalkyl, halocycloalkyl, substituted cycloalkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, aryl, -CN, -N<sub>3</sub>, -NO<sub>2</sub>, -COR<sub>10</sub>, -CO<sub>2</sub>R<sub>7</sub>, -CON(R<sub>9</sub>)<sub>2</sub>, -C(R<sub>10</sub>)=NOR<sub>7</sub>, -SCN, -OR<sub>7</sub>, -N(R<sub>9</sub>)<sub>2</sub>, -SR<sub>8</sub>, -SOR<sub>8</sub>, -SO<sub>2</sub>R<sub>8</sub>, -SN(R<sub>9</sub>)<sub>2</sub>, -SON(R<sub>9</sub>)<sub>2</sub>, -SO<sub>2</sub>N(R<sub>9</sub>)<sub>2</sub>; or

10 when two  $R_{B-1}$  are on adjacent carbon atoms, the two  $R_{B-1}$  may combine to form a 5-7-membered ring fused to the 5 or 6 membered ring giving a fused-bicyclic-ring system; wherein the 5-7-membered ring is saturated or unsaturated having up to two heteroatoms selected from -O-, -S-, -N(R<sub>B-3</sub>)-, or -N= and further having substitution where valency allows on the 5-7-membered ring with up to 2 substituents  
 15 independently selected from  $R_{B-2}$ ;

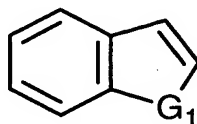
Each  $R_{B-2}$  is independently H, F, Cl, Br, I, alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halocycloalkyl, haloheterocycloalkyl, substituted alkyl, substituted alkenyl, substituted alkynyl, substituted cycloalkyl, substituted heterocycloalkyl, -CN, -NO<sub>2</sub>, -OR<sub>7</sub>, -SR<sub>8</sub>, -S(O)<sub>2</sub>R<sub>8</sub>,  
 20 -S(O)R<sub>8</sub>, -OS(O)<sub>2</sub>R<sub>8</sub>, -N(R<sub>9</sub>)<sub>2</sub>, -C(O)R<sub>10</sub>, -C(S)R<sub>10</sub>, -C(O)<sub>2</sub>R<sub>7</sub>, -C(O)N(R<sub>9</sub>)<sub>2</sub>, -NR<sub>9</sub>C(O)R<sub>10</sub>, -S(O)<sub>2</sub>N(R<sub>9</sub>)<sub>2</sub>, -NR<sub>9</sub>S(O)<sub>2</sub>R<sub>8</sub>, -N(R<sub>9</sub>)C(O)N(R<sub>9</sub>)<sub>2</sub>, or aryl;

$R_{B-3}$  is H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted  
 25 heterocycloalkyl, or aryl;

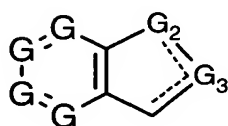
Each  $W^{B-1}$ ,  $W^{B-2}$ ,  $W^{B-3}$ ,  $W^{B-4}$ , and  $W^{B-5}$  are independently N or CR<sub>B-1</sub>, provided that no more than 4 of  $W^{B-1}$ ,  $W^{B-2}$ ,  $W^{B-3}$ ,  $W^{B-4}$ , or  $W^{B-5}$  are simultaneously N;

$R_1$  is a 5-membered heteroaromatic mono-cyclic moiety containing within the  
 30 ring 1-3 heteroatoms independently selected from the group consisting of =N-, -N(R<sub>1-N</sub>)-, -O-, and -S-, and having 0-2 substituent selected from  $R_{1-1}$ , and further having 0-4 substituents independently selected from F, Cl, Br, or I;

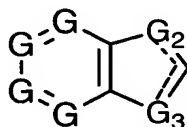
or  $R_1$  is a 9-membered fused-ring moiety having a 6-membered ring fused to a 5-membered ring including the formula



wherein  $G_1$  is O, S or  $NR_{1-N}$ ,



wherein each  $G$  is independently CH,  $C(R_{1-C})$ , or N, and each  $G_2$  and  $G_3$  are independently selected from  $CH_2$ , CH,  $C(R_{1-C})$ , O, S, N, and  $N(R_{1-N})$ , provided that both  $G_2$  and  $G_3$  are not simultaneously O, simultaneously S, or simultaneously O and S, or



wherein each  $G$  is independently CH,  $C(R_{1-C})$ , or N, and each  $G_2$  and  $G_3$  are independently selected from  $CH_2$ , CH,  $C(R_{1-C})$ , O, S, N, and  $N(R_{1-N})$ , provided that each 9-membered fused-ring moiety has 0-1 substituent selected from  $R_{1-1}$ , and further having 0-3 substituents independently selected from F, Cl, Br, or I, wherein the  $R_1$  moiety attaches to other substituents as defined in formula I at any position as valency allows;

Each  $R_{1-C}$  is independently a bond,  $R_{1-1}$ , F, Cl, Br, or I, provided that there is only one bond and further provided that  $R_1$  can have only up to one substituent from  $R_{1-1}$ , and up to 3 substituents from halogen;

$R_{1-N}$  is H, alkyl, haloalkyl, substituted alkyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, or substituted heterocycloalkyl;

$R_{1-1}$  is alkyl, substituted alkyl, haloalkyl,  $-OR_{1-2}$ ,  $-SR_{1-2}$ ,  $-CN$ ,  $-NO_2$ ,  $-N(R_{1-3})_2$ ;

Each  $R_{1-2}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, haloalkyl, halocycloalkyl, or haloheterocycloalkyl;

Each  $R_{1-3}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, haloalkyl, halocycloalkyl, or haloheterocycloalkyl;

$R_2$  is a 6-membered heteroaromatic mono-cyclic moiety containing within the ring 1-4 heteroatoms selected from =N- and having 0-1 substituent selected from  $R_{2-1}$  and 0-3 substituent(s) independently selected from F, Cl, Br, or I;

or  $R_2$  is 10-membered heteroaromatic bi-cyclic moieties containing within one or both rings 1-3 heteroatoms selected from =N-, each 10-membered fused-ring moiety having 0-1 substituent selected from  $R_{2-1}$  and 0-3 substituent(s) independently selected from F, Cl, Br, or I, wherein the  $R_2$  moiety attaches to other substituents as defined in formula I at any position as valency allows;

$R_{2-1}$  is alkyl, substituted alkyl, haloalkyl,  $-OR_{2-2}$ ,  $-SR_{2-2}$ ,  $-CN$ ,  $-NO_2$ ,  $-N(R_{2-3})_2$ ;

Each  $R_{2-2}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, haloalkyl, halocycloalkyl, or haloheterocycloalkyl;

Each  $R_{2-3}$  is independently H, alkyl, cycloalkyl, heterocycloalkyl, haloalkyl, halocycloalkyl, or haloheterocycloalkyl;

$R_7$  is H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, or aryl;

$R_8$  is H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, or aryl;

Each  $R_9$  is independently H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, or aryl;

$R_{10}$  is H, alkyl, haloalkyl, substituted alkyl, alkenyl, haloalkenyl, substituted alkenyl, alkynyl, haloalkynyl, substituted alkynyl, cycloalkyl, halocycloalkyl, substituted cycloalkyl, heterocycloalkyl, haloheterocycloalkyl, substituted heterocycloalkyl, or aryl;

or pharmaceutical composition, pharmaceutically acceptable salt, racemic mixture, or pure enantiomer thereof.

2. The compound of claim 1, wherein X is O.

3. The compound of claim 2, wherein  $W^{A-1}$ ,  $W^{A-2}$ ,  $W^{A-3}$ ,  $W^{A-4}$ , and  $W^{A-5}$  are each  
5  $CR_A$ .

4. The compound of claim 3, wherein  $W^{A-1}$  and  $W^{A-4}$  are CH;  $W^{A-2}$  is CH or  $CR_{A-1}$ , where  $R_{A-1}$  is halo;  $W^{A-3}$  is  $CR_{A-1}$ ; and  $W^{A-5}$  is  $CR_{A-2}$ .

5. The compound of claim 4, wherein B is thienyl, thiazolyl, furanyl, isothiazolyl, thiadiazolyl, isoxazolyl, oxazolyl, and pyrdinyl, any of which is optionally substituted  
10 as allowed by formula I.

6. The compound of claim 5, wherein  $R_{A-1}$  of  $W^{A-3}$  is  $OR_7$ .

7. The compound of claim 6, wherein  $R_{A-2}$  is  $R_1$ ,  $OR_1$ ,  $NHR_1$ ,  $R_2$ ,  $OR_2$ , and  $NHR_2$ .

8. The compound of claim 7, wherein  $R_7$  is alkyl, and substituted alkyl;  
15 wherein  $R_1$  is independently any one of thienyl, thiazolyl, furanyl, isothiazolyl, thiadiazolyl, isoxazolyl, and oxazolyl, any of which is optionally substituted as allowed by formula I;

and wherein  $R_2$  is pyridinyl, any of which is optionally substituted as allowed by formula I.

9. The compound of claim 8, wherein B is isoxazol-3-yl having a substituent at C-5.  
20

10. The compound of claim 9, wherein the compound is  
N-[4-ethoxy-2-(pyridin-4-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;  
N-[4-ethoxy-2-(pyridin-3-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;  
25 N-[4-ethoxy-2-(pyridin-2-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;  
and pharmaceutically acceptable salts thereof.

11. The compound of claim 9, wherein the compound is  
N-[4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;  
N-[4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;  
30 and pharmaceutically acceptable salts thereof.

12. The compound of claim 9, wherein the compound is  
N-[4-methoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;  
and pharmaceutically acceptable salts thereof.

13. The compound of claim 9, wherein the compound is

N-[4-ethoxy-2-(2-furyl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-ethoxy-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

and pharmaceutically acceptable salts thereof.

5 14. The compound of claim 9, wherein the compound is

N-[4-ethoxy-5-fluoro-2-(pyridin-4-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-ethoxy-5-fluoro-2-(pyridin-3-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-ethoxy-5-fluoro-2-(pyridin-2-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-chloro-4-ethoxy-2-(pyridin-4-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

10 N-[5-chloro-4-ethoxy-2-(pyridin-3-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-chloro-4-ethoxy-2-(pyridin-2-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-(2-methoxy-ethoxy)-2-(pyridin-4-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-(2-methoxy-ethoxy)-2-(pyridin-3-ylamino)phenyl]-N'-(5-methylisoxazol-3-

15 yl)urea;

N-[4-(2-methoxy-ethoxy)-2-(pyridin-2-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(pyridin-4-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

20 N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(pyridin-3-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(pyridin-2-ylamino)phenyl]-N'-(5-methylisoxazol-3-yl)urea; and pharmaceutically acceptable salts thereof.

15. The compound of claim 9, wherein the compound is

25 N-[4-methoxy-5-fluoro-2-(1,3-thiazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-chloro-4-methoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

and pharmaceutically acceptable salts thereof.

16. The compound of claim 9, wherein the compound is

N-[4-methoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

30 N-[5-chloro-4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-ethoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

N-[5-chloro-4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

- 5 N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea; and pharmaceutically acceptable salts thereof.

17. The compound of claim 9, wherein the compound is

N-[4-ethoxy-5-fluoro-2-(2-furyl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-ethoxy-5-fluoro-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

- 10 N-[5-chloro-4-ethoxy-2-(2-furyl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-chloro-4-ethoxy-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea;

- 15 N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-(5-methylisoxazol-3-yl)urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)isoxazol-3-yl]urea; and pharmaceutically acceptable salts thereof.

18. The compound of claim 8, wherein B is isoxazol-5-yl having a substituent at C-3.

- 20 19. The compound of claim 18, wherein the compound is

N-[2-(2-furyl)-4-methoxyphenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[4-ethoxy-2-(2-furyl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea; and pharmaceutically acceptable salts thereof.

20. The compound of claim 18, wherein the compound is

- 25 N-[4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-fluoro-2-(2-furyl)-4-methoxyphenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[4-ethoxy-5-fluoro-2-(2-furyl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-chloro-2-(2-furyl)-4-methoxyphenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

- 30 N-[5-chloro-4-ethoxy-2-(2-furyl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea; and pharmaceutically acceptable salts thereof.

21. The compound of claim 18, wherein the compound is

N-[4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;  
 N-[4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;  
 N-[2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea; and  
 pharmaceutically acceptable salts thereof.

22. The compound of claim 18, wherein the compound is

N-[4-methoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[4-ethoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-chloro-4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-chloro-4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-chloro-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-thiazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea; and pharmaceutically acceptable salts thereof.

23. The compound of claim 18, wherein the compound is

N-[4-ethoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;  
 and pharmaceutically acceptable salts thereof.

24. The compound of claim 18, wherein the compound is

N-[4-ethoxy-5-fluoro-2-(1,3-thiazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[5-chloro-4-ethoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(1,3-thiazol-2-yl)phenyl]-N'-[3-(trifluoromethyl)isoxazol-5-yl]urea; and pharmaceutically acceptable salts thereof.

25. The compound of claim 8, wherein B is 1,3,4-thiadiazol-2-yl having substitution at C5.



26. The compound of claim 25, wherein the compound is

N-[4-ethoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-methoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

27. The compound of claim 25, wherein the compound is

N-[4-methoxy-5-fluoro-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-ethoxy-5-fluoro-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-4-methoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-4-ethoxy-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-thiazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

28. The compound of claim 25, wherein the compound is

N-[2,4-dimethoxy-5-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

29. The compound of claim 25, wherein the compound is

N-[4-methoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-ethoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-4-methoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

- 5 N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

30. The compound of claim 25, wherein the compound is

N-[2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

- 10 N-[2-(2-furyl)-4-methoxyphenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;  
N-[4-ethoxy-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;  
and pharmaceutically acceptable salts thereof.

31. The compound of claim 25, wherein the compound is

- 15 N-[5-fluoro-2-(2-furyl)-4-methoxyphenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[4-ethoxy-5-fluoro-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-fluoro-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

- 20 N-[5-chloro-2-(2-furyl)-4-methoxyphenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-4-ethoxy-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-chloro-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

- 25 N-[4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(2-furyl)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

32. The compound of claim 25, wherein the compound is N-(4-methoxy-2-thien-2-ylphenyl)-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically

- 30 acceptable salts thereof.

33. The compound of claim 25, wherein the compound is

N-(5-fluoro-4-methoxy-2-thien-2-ylphenyl)-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;

N-(5-chloro-4-methoxy-2-thien-2-ylphenyl)-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts thereof.

34. The compound of claim 25, wherein the compound is N-[4-ethoxy-2-(pyridin-3-ylamino)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and  
5 pharmaceutically acceptable salts thereof.

35. The compound of claim 25, wherein the compound is  
N-[4-ethoxy-5-fluoro-2-(pyridin-3-ylamino)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;  
N-[5-chloro-4-ethoxy-2-(pyridin-3-ylamino)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-  
10 thiadiazol-2-yl]urea;  
N-[4-(2-methoxy-ethoxy)-2-(pyridin-3-ylamino)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea;  
N-[5-fluoro-4-(2-methoxy-ethoxy)-2-(pyridin-3-ylamino)phenyl]-N'-[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]urea; and pharmaceutically acceptable salts  
15 thereof.

36. The compound of claim 8, wherein B is pyridinyl.

37. The compound of claim 36, wherein the compound is N-(6-cyanopyridin-3-yl)-N'-[4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]urea, and pharmaceutically acceptable salts thereof.

20 38. The compound of claim 36, wherein the compound is  
N-(6-cyanopyridin-3-yl)-N'-[4-ethoxy-5-fluoro-2-(1,3-oxazol-2-yl)phenyl]urea;  
N-(6-cyanopyridin-3-yl)-N'-[5-chloro-4-ethoxy-2-(1,3-oxazol-2-yl)phenyl]urea;  
N-(6-cyanopyridin-3-yl)-N'-[4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-yl)phenyl]urea;  
N-(6-cyanopyridin-3-yl)-N'-[5-fluoro-4-(2-methoxy-ethoxy)-2-(1,3-oxazol-2-  
25 yl)phenyl]urea; and pharmaceutically acceptable salts thereof.

39. A compound of claim 1, wherein the compound has an isotopic label.

40. A compound of claim 1, wherein the compound contains a photoaffinity label wherein the compound becomes irreversibly incorporated into the nAChR upon  
30 exposure to ultraviolet light.

41. A pharmaceutical composition comprising a compound of claim 1, optionally comprising another agent including an anti-psychotic agent; an agent that increases the level of ACh in the brain;

an agent that increases ACh levels, inhibits the activity of acetylcholinesterase, or activates the production of ACh;

a monoamine reuptake inhibitor;

a psychostimulant; or

5 an agent that is an alpha 7 nAChR agonist.

42. A method for treating a disease or condition in a mammal in need thereof, wherein the mammal receives symptomatic relief from activation of an alpha 7 nAChR comprising the administration of a therapeutically effective amount of a compound of claim 1.

10 43. The method of claim 42, wherein the disease or condition is cognitive and attention deficit symptoms of Alzheimer's, neurodegeneration associated with diseases such as Alzheimer's disease, pre-senile dementia (mild cognitive impairment), senile dementia, schizophrenia or psychosis and related cognitive deficits associated therewith, attention deficit disorder, attention deficit hyperactivity  
15 disorder, mood and affective disorders, amyotrophic lateral sclerosis, borderline personality disorder, traumatic brain injury, behavioral and cognitive problems associated with brain tumors, AIDS dementia complex, dementia associated with Down's syndrome, dementia associated with Lewy Bodies, Huntington's disease, depression, general anxiety disorder, age-related macular degeneration, Parkinson's  
20 disease, tardive dyskinesia, Pick's disease, post traumatic stress disorder, dysregulation of food intake including bulimia and anorexia nervosa, withdrawal symptoms associated with smoking cessation and dependant drug cessation, Gilles de la Tourette's Syndrome, glaucoma, neurodegeneration associated with glaucoma, or symptoms associated with pain.

25 44. The method of claim 42, wherein the disease or condition is attention deficit hyperactivity disorder and wherein the mammal receives symptomatic relief from the administration of at least one of a monoamine reuptake inhibitor, or psychostimulant for a therapeutically effective interval, optionally wherein the psychostimulant is methylphenidate (Ritalin) administered at about 0.01 to about 0.85 mg/kg/day;  
30 dextroamphetamine (Dexedrine) administered at about 0.07 to about 0.85 mg/kg/day; amphetamine (Adderall) administered at about 0.05 to about 0.6 mg/kg/day; and pemoline (Cylert) administered at about 0.1 to about 1.6 mg/kg/day; and wherein the monoamine reuptake inhibitor is desipramine (Norpramin) administered at about 0.5

to about 5.0 mg/kg/day; nortriptyline administered at about 0.1 to about 3.0 mg/kg/day; atomoxetine (Strattera) administered at about 0.1 to about 3.0 mg/kg/day; reboxetine administered at about 0.03 to about 3.0 mg/kg/day; fluoxetine (Prozac) at about 0.2 to about 20 mg/kg/day; tomoxetine administered at about at about 0.1 to about 1.1 mg/kg/day; bupropion (Wellbutrin) administered at about at about 1.0 to about 1.1 mg/kg/day; and modafonil (Provigil) administered at about at about 1.0 to about 5.7 mg/kg/day.

45. The method of claim 44, wherein the mammal receives therapeutic relief from the administration of an agent that inhibits the activity of acetylcholinesterase; wherein the agent inhibiting acetylcholinesterase is optionally Aricept and Reminyl.

46. The method of claim 44, wherein the mammal receives therapeutic relief from the administration of an agent that is ACh or that increases levels of ACh in the brain, optionally ACh or a nutritional supplement.

47. A method for treating a disease or condition in a mammal in need thereof, wherein the mammal receives symptomatic relief from decreasing the level of TNF- $\alpha$  comprising administration of a therapeutically effective amount of a compound of claim 1.

48. The method of claim 47, wherein the symptomatic relief would be to treat the mammal for pain, inflammation, cancer, or diabetes.

49. A method for treating a disease or condition in a mammal in need thereof, wherein the mammal receives symptomatic relief from increasing vascular angiogenesis, optionally wherein the disease or condition is wound healing, healing bone fracture, ischemic heart disease, or stable angina pectoris, comprising administering a therapeutically effective amount of a compound of claim 1.

50. A method for diagnosing disease in a mammal, comprising administering a compound of claim 39 to the mammal and detecting the binding of that compound to an alpha 7 nAChR, optionally using position emission topography or single-photon emission computed tomography.

51. The method of claim 50, wherein the disease is Alzheimer's disease, neurodegeneration associated with diseases such as Alzheimer's disease, pre-senile dementia (mild cognitive impairment), senile dementia, Parkinson's disease, schizophrenia, psychosis, attention deficit disorder, attention deficit hyperactivity disorder, depression, anxiety, general anxiety disorder, post traumatic stress disorder,

mood and affective disorders, amyotrophic lateral sclerosis, borderline personality disorder, traumatic brain injury, behavioral and cognitive problems in general and associated with brain tumors, AIDS dementia complex, dementia associated with Down's syndrome, dementia associated with Lewy Bodies, Huntington's disease, 5 tardive dyskinesia, Pick's disease, dysregulation of food intake including bulimia and anorexia nervosa, withdrawal symptoms associated with smoking cessation and dependent drug cessation, Gilles de la Tourette's Syndrome, age-related macular degeneration, glaucoma, neurodegeneration associated with glaucoma, diabetic retinopathy, or symptoms associated with pain.

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